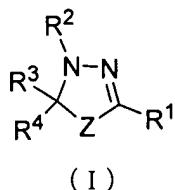


AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for therapeutic treatment of a colon cancer which comprises administering an effective amount of An antitumor agent comprising a thiadiazoline derivative compound represented by the general formula (I), or a pharmacologically acceptable salt thereof as an active ingredient:



<wherein

Z represents a sulfur atom; or S(=O),

R¹ represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted phenyl; aryl, a substituted or unsubstituted aromatic heterocyclic group, or C(=W)R⁵ (wherein W represents an oxygen atom or a sulfur atom, and R⁵ represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl,

—YR⁶ (wherein Y represents an oxygen atom or a sulfur atom, and R⁶ represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl,

~~substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or~~

~~-NR⁷R⁸ [wherein R⁷ and R⁸ are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, OR⁹ (wherein R⁹ has the same meaning as that of the aforementioned R⁶), or NR¹⁰R¹¹ (wherein R¹⁰ and R¹¹ are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R¹⁰ and R¹¹ are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group), or R⁷ and R⁸ are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group]),~~

R² represents

a hydrogen atom,

substituted or unsubstituted lower alkyl, or

-C(=W¹)R¹² [wherein W¹ represents an oxygen atom or a sulfur atom, R¹² represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, -Y¹R¹³ (wherein Y¹ represents an oxygen atom or a sulfur atom, and R¹³ represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted c

ycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or -NR¹⁴R¹⁵ (wherein R¹⁴ and R¹⁵ are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R¹⁴ and R¹⁵ are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group); group);

R³ represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, and

R⁴ represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted phenyl aryl, or a substituted or unsubstituted heterocyclic group, or R³ and R⁴ are combined together to represent

$-(CR^{16A}R^{16B})_{m1}-Q-(CR^{16C}R^{16D})_{m2}$ {wherein Q represents a single bond, substituted or unsubstituted phenylene, or cycloalkylene, m1 and m2 are the same or different, and each represents an integer of 0 to 4, with the proviso that m1 and m2 are not 0 at the same time,

R^{16A}, R^{16B}, R^{16C} and R^{16D} are the same or different, and represent a hydrogen atom, halogen, substituted or unsubstituted lower alkyl, OR¹⁷ {wherein R¹⁷ represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted

aryl, a substituted or unsubstituted heterocyclic group, $\text{CONR}^{18}\text{R}^{19}$ (wherein R^{18} and R^{19} are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R^{18} and R^{19} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group),

$\text{SO}_2\text{NR}^{20}\text{R}^{21}$ (wherein R^{20} and R^{21} have the same meanings as those of the aforementioned R^{18} and R^{19} , respectively), or COR^{22} (wherein R^{22} represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group)],

$\text{NR}^{23}\text{R}^{24}$ [wherein R^{23} and R^{24} are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, COR^{25} (wherein R^{25} represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, substituted or unsubstituted lower alkoxy, substituted or unsubstituted aryloxy, amino, substituted or unsubstituted lower alkylamino, di (substituted or unsubstituted lower alkyl)amino, or substituted or unsubstituted arylamino), or SO_2R^{26} (wherein R^{26} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a

~~substituted or unsubstituted heterocyclic group), or R²³ and R²⁴ are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group], or -CO₂R²⁷ (wherein R²⁷ represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or R^{16A} and R^{16B}, or R^{16C} and R^{16D} are combined together to represent an oxygen atom, and when m1 or m2 is an integer of 2 or more, any of R^{16A}, R^{16B}, R^{16C} and R^{16D} may be the same or different, and any two of R^{16A}, R^{16B}, R^{16C} and R^{16D} which are bound to the adjacent two carbon atoms may combine together to form a bond} >.~~

2.- 7. (Cancelled)

8. (Currently Amended) The method ~~The antitumor agent~~ according to claim 1, wherein R² is a hydrogen atom, substituted or unsubstituted lower alkyl, or -C(=W¹)R¹² (wherein W¹ and R¹² have the same meanings as those mentioned above, respectively).

9. (Currently Amended) The method ~~The antitumor agent~~ according to claim 1, wherein R² is -C(=W¹)R¹² (wherein W¹ and R¹² have the same meanings as those mentioned above, respectively).

10. (Currently Amended) The method ~~The antitumor agent~~ according to claim [[8]] 9, wherein R¹² is substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, or substituted or unsubstituted cycloalkyl.

11. (Currently Amended) The method ~~The antitumor agent~~ according to claim [[8]] 9, wherein R¹² is substituted or unsubstituted lower alkyl.

12. (Currently Amended) The method ~~The antitumor agent~~ according to claim [[8]] 9, wherein R¹² is lower alkyl.

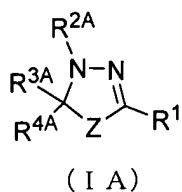
13. (Currently Amended) The method ~~The antitumor agent~~ according to claim [[8]] 9, wherein W¹ is an oxygen atom.

14. - 15. (Cancelled)

16. (Currently Amended) An ~~The~~ antitumor agent according to claim 1, wherein R³ is substituted lower alkyl.

17. - 23. (Cancelled)

24. (Currently Amended) A compound thiadiazoline derivative represented by the formula (IA) or a pharmacologically acceptable salt thereof:



{wherein

Z has the same meaning as that mentioned above, above;

R¹ has the same meaning as that mentioned above, above;

(A) when R¹ is substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, or C(=W)R⁵ (wherein W and R⁵ have the same meanings as those mentioned above, respectively), R^{2A}, R^{3A} and R^{4A} have the same meanings as those of the aforementioned R², R³ and R⁴ (with proviso that Z^A is a sulfur atom, R¹ is benzyl, R^{2A} is acetyl, one of R³ and R^{4A} is methyl, and the other of R³ and R^{4A} is not 2-oxopropyl), respectively

— (B) when R¹ is substituted or unsubstituted lower alkynyl, or a substituted or unsubstituted aromatic heterocyclic group, R^{2A} and R^{3A} have the same meanings as those of the aforementioned R² and R³, respectively, and R^{4A} represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, and

— (C) when R¹ is substituted or unsubstituted aryl,
R^{2A} represents -C(=W¹)R¹² -C(=W)R¹² (wherein W¹ W and R¹² have the same meanings as those mentioned above, respectively), respectively);

R^{3A} represents

-(CH₂)_kNHSO₂R^{3B} [wherein k represents an integer of 1 to 6, and R^{3B} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, or -NR^{7B}R^{8B} (wherein R^{7B} and R^{8B} have the same meanings as those of the aforementioned R⁷ and R⁸, respectively are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, -OR⁹ (wherein R⁹ represents a hydrogen atom,

substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or
-NR¹⁰R¹¹ (wherein R¹⁰ and R¹¹ are the same or different, and represent a hydrogen atom,
substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or
R¹⁰ and R¹¹ are combined together with the adjacent nitrogen atom to form a substituted
or unsubstituted heterocyclic group), or R⁷ and R⁸ are combined together with the
adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group)],
-(CH₂)_kNR^{7C}R^{8C} (wherein k has the same meaning as that mentioned above, and R^{7C} and
R^{8C} have the same meanings as those of the aforementioned R^{7B} and R^{8B} R⁷ and R⁸,
respectively), or
-(CH₂)_kNHC(=O)R^{7D} (wherein k has the same meaning as that mentioned above, and R^{7D}
has the same meaning as that of the aforementioned R^{7B}); R⁷), and
R^{4A} has the same meaning as that of the aforementioned R⁴ }.

25.- 33. (Cancelled)

34. (Currently Amended) The compound thiadiazoline derivative or a
pharmacologically acceptable salt thereof according to claim 24, wherein R^{2A} is -C(=O)R¹²
(wherein R¹² have has the same meanings as those mentioned above).

35. (Currently Amended) The compound thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 34, wherein R¹² is lower alkyl.

36.- 37. (Cancelled)

38. (Withdrawn - Currently Amended) The compound thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 24, wherein R^{3A} is - (CH₂)_kNHSO₂R^{3B} (wherein k and R^{3B} have the same meanings as those mentioned above, respectively).

39. - 41. (Cancelled)

42. (Currently Amended) The compound thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 24, wherein R^{4A} is phenyl.

43. (Currently Amended) A medicament comprising the compound thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 24 as an active ingredient.

44. - 47. (Cancelled)

48. (Currently Amended) A method for inhibiting a mitotic kinesin Eg5 which comprises administering an effective amount of the compound thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1.

49. - 50. (Cancelled)

51. (Currently Amended) A method for inhibiting a mitotic kinesin Eg5 which comprises administering an effective amount of the compound thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 24.

52. (Cancelled)

53. (Currently Amended) A method for therapeutic ~~and/or preventive~~ treatment of a colon cancer malignant tumor which comprises administering an effective amount of the compound thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 24.

54. - 56. (Cancelled)